

1 ccgcacatcccta gccggccact cacacaaggc aggtgggtga ggaaatccag agttgccatg
61 gagaaaaattc cagtgtcagc attcttgctc ctgtggccc ttcctcacac tctggccaga
121 gataccacag tcaaaccctgg agccaaaag gacacaaagg actctcgacc caaactgccc
181 cagaccctct ccagaggtt gggtgaccaa ctcatctgga ctcagacata tgaagaagct
241 ctatataaat ccaagacaag caacaaaccc ttgatgatta ttcatcatctt gtatgagtgc
301 ccacacagtgc aagctttaaa gaaagtgttt gctgaaaata aagaatcca gaaattggca
361 gagcagtttgc tcctccctcaa tctgggttat gaaacaactg acaaacacct ttctcctgtat
421 gcccagtatg tccccaggat tatgttttgtt gacccatctc tgacagtttag agccgatatac
481 acttggaaagat attccaaatcg tctctatgct tacgaaacctg cagatacagc tctgttgctt
541 gacaacatga agaaagctct caagttgtcg aagactgaat tgtaaagaaa aaaaatctcc
601 aagcccttct gtctgtcagg ctttgagact tgaaccaga agaagtgtga gaagactggc
661 tagtgtggaa gcatagtgaa cacactgatt agtttatggg ttaatgttac aacaactatt
721 ttttaagaaaa aacaagtttt agaaattttgg ttcaagtgt acatgtgtga aaacaatatt
781 gtataactacc atatgtgagcc atgattttct aaaaaaaaaaa ataaatgttt tgggggtgtt
841 ctgttttctc caacttggc tttcacagtgt gtcgtttac caaataggat taaacacacaca
901 caaaatgctc aaggaaaggga caagacaaaaa cccaaacttag ttcaatgtat gaagacaaaa
961 gaccaaggtt tcatctcacc acaccacagg ttctcaactg atgactgtaa gtagacacaga
1021 gcttaatcaa cagaagtatc aagccatgtg ctttagcata aaagaatatt tagaaaaaca
1081 tcccaagaaaa atcacatcac taccttaggt caactctggc caggaactct aaggtacaca
1141 ctttcattta gtaattaaat tttagtcaga ttttgcacaa cctaattgtc tcagggaaag
1201 cctctggcaa gtagcttct ctttcagagg tctaatttttag tagaaaggtc atccaaagaa
1261 catctgcact cctgaacaca ccctgaagaa atccctgggaa ttgaccttgc aatcgatttg
1321 tctgtcaagg tcctaaagta ctggagtgaa ataaatttcg ccaacatgtg actaatttgg
1381 agaagagcaa aggggtggta cgtgttgc aggcagatgg agatcagagg ttacttaggt
1441 ttaggaaacg tgaaaggctg tggcatcagg gttagggagc attctgccta acagaaatata
1501 gaattgtgtg ttaatgtctt cactctatac ttaatctcactt attcattaat atatggaaatt
1561 cctctactgc ccagccccctc ctgatttctt tggccccctgg actatggtc tgtatataat
1621 gctttgcagt atctgttgc tgcatttgcattt aacttttttgc gataaaaccc tttttgcac
1681 gaaaaaaaaaaa aaaaaaaaaaaa a

FIG. 1

1 MEKIPVSAFLLLVALSYTLARDTTVKPGAKKDTKDSRPKL
41 PQTLSRGWGDQLIWTQTYEEALYKSKTSNKPLMIIHHLDE
81 CPHSQALKKVFAENKEIQKLAEQFVLLNLVYETTDKHLSP
121 DGQYVPRIMFVDPSLTVRADITGRYSNRLYAYEPADTALL
161 LDNMKKALKLLLTEL

FIG. 2

1 ggcaaccctt gcggctcaca caaaggcagga gggtgaaaag cccagatttgcatggagaa
61 atttcagtgt tctgcaatcc tgcttcttgt ggccattttctt ggtaccccttgg ccaaagacac
121 cacagtcaaaa tctggagccca aaaaggaccc aaaggactt ccggccaaac tacctcgac
181 actctccaga ggttggggcg atcagctcat ctggacttag acatacgaag aagctttata
241 cagatccaag acaagcaaca gaccctttagt ggtcattttcat cacttggacg aatgccccaca
301 cagtcaagcc ttaaaagaaag tgtttgcgttga acataaaagaa atccagaaat tggcagagca
361 gtttggcttc ctcacccctgg tctatgaaac aaccgacaag cacccttctc ctgatggcca
421 gtacgtcccc agaattttgtt tttagaccc atcccctgacg gtgagggcag acatcactgg
481 acgataactca aaccggctct acgttatgtt accttctgac acagctttgt tttacgacaa
541 catgaagaaa gctctcaagc tgctaaagac agaattttgtt agctaactgc gcaccgggtc
601 aggagaccag aaggcagaag cactgtggac ttgcagatta cagtagttaatgttaca
661 acagatatat tttttaaaca cccacagggtt gggaaacaat attattatct actacagtga
721 acatgatttt tttagaaaaat aaagtcttgtt gagaactcca aaaaaaaaaaaaaaaa

FIG. 3

MEKFSVSAI₁LLVAISGTLAKDTTVKGAKKDPKDSRPKLPQTLRGWGDQLIWTQTYEEALYRS
KTSNRPLMVI₂HLDEC₃PHSQALKVFAEHKEIQKLAEQFVLLNLVETTDKHLSPDGQYVPRIVF
VDPSLTVRADITGRYSNRLYAYEP₄SDTALLYDNMKKALKLLKTEL

FIG. 4

1 cgccaaccct tgccggctcac acaaaggcagg agggagggaga gctcagattt gccatggaga
61 aattttcagt ctcggcaatc ctgc₁ttcttg tggccatctc tggtactctg gccaaagaca
121 ccacagtcaa atctggatcc aaaaaggacc caaaggactc tcgacccaaa ctaccccaga
181 ccctgtccag aggttggga gatcagctca tctggactca gacttacgaa gaagccttat
241 acaaatccaa gacaagcaac agacccttg₂ tggtcattca tcac₃ttggac gaatgcccgc
301 acagtcaagc tttaaagaaa gtgtttgtg₄ aaaataagga gatcagaaaa ttggcagagc
361 agtttgttct cctcaacttg atctatgaaa caactgacaa gcac₅tttct cctgatggcc
421 agtacgtccc cagaattgtg ttgtggacc cttccctgac ggtgagggca gacatcaccg
481 gaagatactc aaaccgtctc tacgcttacg aacc₆tctga cacagctctg ctgcacgaca
541 acatgaagaa agctctcaag ttgctgaaga cagagtgt₇ gagtcaactg tacagtgcct
601 caggagccgg gaaggcagaa gcactgtgga cctgccc₈atg acattacagt ttaatgttac
661 acaaatgt₉ tttttaaac acccacgtgt ggggaaacaa tattattatc tactacagac
721 acatgat₁₀ttt ctagaaaata aagtcttgtg agaactcc

FIG. 5

MEKFSVSAI^{LL}LVAISGTLAKDTTVKSGSKKDPKDSRPKL^QTLRGWGDLIWTQTYEEALYKS
KTSNRPLMVI^{HH}LDEC^{PHS}QALKVFAENKEI^QKLAEQFVLLNLIYETTDKHLSPDGQYVPRIVF
VDP^SLT^VRADITGRYSNRLYAYEPSDTALLHDNMKKALKLLKTEL

FIG. 6

1 AACCCCTAGTT ACCTCACACC AAGACAGATA TGCCAAAGAT TCCACAGCCT
51 CAATAGCATG TGTAGGATAT CTGCTAATAA TTACCTCCTC CTTGCCATCC
101 GTCAGCCACT ATGACAAACT CTGGGTTTTT CCTGACATGA GATTAGGCAC
151 ATGAGTATAG AATAATTATA TCACTATAAT TAACTGTAAC AAATCAAAGA
201 CTTTTTTTT TAAGTTCCGG AGTATGTGTG TAGGATGTGC AGGTTGTT
251 CATCAGTAAA CGTGTGCCAT GGTGGTTGC TGCACTGATC AACCCAACAA
301 CTAGGTCTTA AGCCAGCCTG CATTAGCTAC TTTTATCAAA TGTTATGGC
351 TGAATTGTGT CCCCCCCAAA AATTCATATG TTGAAGTCTT AATCCCCAGG
401 ACTTCAGAAT AGGATCTTTA CAGAGGTAAT TAAGTTAAAG TAGGTCATTA
451 GGCAGGACCC AAATACAATA TGACTGGTGT CCTTATAAGA AAAGGAAAAA
501 AATGACACAG ACAGGTACAG AGGGAAAAAC CATGTGGCAA TACAGGGAAA
551 AGTCATTTAA TATTCAAAAT GGTCCCATAT GTTAATATTA TCCCCATATT
601 ATAGATGGAG AAACTGAAGT TTTGGGGATG TTAAATGAGA TCTCAGATCA
651 TCCTATGAGC AAGCACCAAGG ATGCAGGATT CAGATGGAA TCTCGTGACT
701 CCAAATCCCA TCCACTTGTT ACTTTCAGTG GATAAGGGAC TGAAGGACTT
751 TGGTCCCAAC TCTGCCCTAA ACTAGTTGTG AGACCTCAA AAAGTTATGA
801 ATTTTTGCC ATCTTCATTT ATTCACTCTGT AAAATGAAAG ACTGGAATTG
851 AATATTACAA GGGTCTATCT AAGGGCCTGC TAGTTTAAG AATTTTGCTC
901 AAATCATCGT TTTCAAACTC CTGAAGAAAT TACTTCTATA AATTCAATTAG
951 AATTGAAAGG AAATTCAAGTA TTTGGAGAAT CACGATTTG CCCACAGAAT
1001 TCAAGGATTT ATTGGAAAAA TATACATACT TGCAAATGTT TTTGAAATAT
1051 TATGACCTTA ACTCATTAA AAAAGTCATT TATATAGGGC TTGCATCCCA
1101 TTCATTAAC TCTGTTGTT AACATTTCT TCATTCTGAG CTTTAAAGA
1151 CTGCACACAA CTTCATGAAC AAAATACAGG ATTAAAATTT TCTGACAGAA
1201 AATTAAATT CCAGTTTAA AATCTTCAGG GAGTAATTAA ATGGTCTTGA
1251 GGGGAAAAAA AACTTGGTTG CAGACCTTAG TTTTAGGTC TGAGAAAATG

1301 GAGTAAATGG CTTCCTGCTT GCGTGGCAGG AAAGTTGCC TTTAAATAAG
1351 AGATTATCTG TGAAATACCT TTGAACCTTG TGGAGGGAAG TTGCTGCATA
1401 CATTCAATGG CAAGGCATTT ATTACAAGCT CACGATATTA GGCTGTFFFF
1451 TTTTTTTTTT TTGCCAATAC TTCCTCAGTT TTGAAAAATT ACGTGGGTTA
1501 CTTGATTTGT ATTTTTTTTC ATACCTGTAG AAGTTAGGGT GCATTGTTTT
1551 GACAGGAGCA GGGAAAGTATT GTAGAAAATA ATTTTTATCA TAATGGAGTA
1601 TGGCAGGTAA TATGACTGCG AGGATCAGAA TTGTGAATCA TCTCTTGTGT
1651 GTCTTCAAAGT AAATAAAGGC AATCTGCCA CGGAGCAGAA AAAAAATCTA
1701 CAAACTACAA ACTCTGTCCA ATCATGTAAA GACAAATCAG CCTTCAGGCA
1751 AATCAAATGT CTTCAATTCAA AGTCTACCTG GATTGGCAC TCTGCCATC
1801 GTTCAAAAC CTCTTAACAA TACGTTTCAC AAATAGTTAA AAACATGCAT
1851 ACTGAAAAGC ATACTTTGC AATGTTATTT TTAAAAACAA GGAACTCTTT
1901 AACCCAGGGA AGATAATCAC TTGGGGAAAG GAAGGTTCGT TTCTGAGTTA
1951 GCAACAAGTA AATGCAGCAC TGGTGGGTGG GATTGAGGTG TGCCCTGGTG
2001 CATAAAATAGA GACTCAGCTG TGCTGGCACA CTCAGAAGCT TGGACCGCAT

FIG. 7

1 AAAGGTCTAG AAAGAAACCT TTTAAATGAG TGAACCTTAC CATAACCTAGA
51 AATGCTGTGG GCTAGTGACT CTTGAAATAA CTCCATTGCG TTATGCTTCT
101 AAAAGGTCTA CAGAGACCCT TTTTTAAAAA GATGATTGAT TAAAAAAAAC
151 TGATTGAGG TAAAAACCTT AACTAGAATT GCTCTCACAT ATCTAAATAT
201 CACTATTTAG CCTTTAGTTC TATTCAAACC ATTATTTAC AGATTAGAAA
251 CACCAAACAA ACGATTAAGC AAACAAAAAT AGAACAGTCA ATAGTTTCT
301 AAAGGCCCTA CAATTAGTTG AGGGCAGAGC TAGGAGGAAA GCCAGGGCTC
351 TTCTACTCCA CTATCTTAGG CATTGGGAAA TGGGTGGGAT TTCGGGTCAA
401 TTACAGTCAG CATCCTGCTT CCACACTCTG GATGATGATA TCAGAGGTGA
451 CACTGAACAC CCTGAAACTT TAGTTCCAC GCCTGTAACA GAGTTCCATG
501 CAACAGTTCA GAGCGACATA GTCGTGAACA TAGAGTGAAC TGAGGAAGAG
551 GAAGAGGCTT GGGATGAACG TAGGGTCCCT GCTTCCACAG AACAGGGACA
601 GCCTGGGAGG CTGAAGCATC GGCGATTCAC CTTCGCTCAA CCTGGAGGC
651 TCCACACAGA CCATTGATGT GTCAGCAGCG TTAGGTTCTT CTCTTCTTGG
701 CCTGTAGATG AAGTCATTAT GTGCCTGTGT CTCTGACCTA AGTTTCTTC
751 CTATGAGAAT AACAGTCATA TTAGATTAGA ACCCAGTCTA ATGACCTATT
801 TCACTTACTT TAAATTCTT ATTCATTTAT TTCAATTACT TTCAATTACT
851 TTACTTACTG TGGTACTTAG AATCAAATTG AGAGCCTTGC ACATACTTAA
901 CAAATGCTTA ATCTCTCTT AAGACCCTCT CTCTGTGTAT GATCATCTGA
951 TGAGGTCCTG GGAATTACAG CACATGGATT CCTTTAAAAC ACATCTCAAC
1001 CATAACCTCTT GGTAAATTAAA AACATCTCTA ATTTGCTGTA ATTCACCTATA
1051 ATGATATAAC AGCTATCCTG GAGTATTCCCT GTGTCTAATT T CATGCTGGT
1101 AAAGCTCTGG TTATGGTACA ACAAAAGATGA GGTAAATTATT ACAACATCCT
1151 GCACATACTG GGGTATCTGT GGCATCCTTG GTACATCAGT CCTGAAACGA
1201 AGCCAATATC TACAGTAGCT TTGAGATGCG TAGGCGAGGG TAATTCTTT
1251 ATGCTACTGA GGTGGTACTG TGTGGTCATT CTTGTGATC CCTGATGTT
1301 GCGATGCACA CCCACAAACA CACATTGTA CACATATATT ATCATCAGG

1351 GCCATTATTA GCTCACAAACA TTATCCTATC CTTCCCTTCT TCAATAACCT
1401 CTCCGAGTTT GAAGAGTCCA TGGCGATGAT TTGCGGGTT TATACCTGTG
1451 ATTAAAGCGC ACACAAAAAA TGATATTGTG GAAAATAACA TGTCTTGTGA
1501 TCGAGCATGG CCAGCTGTAT AACTGTAAGA AGGATTAGAA CTGTGAATCA
1551 TCCTTAAGAA AAAAAAAAAG AAAAAAAAAG CTAAATAAAAT GCAATCTGCC
1601 CAAGAGGGAG GAAATGAATA CCTATAAACCA ACAACTTCTA TCCAATCACA
1651 TACAGACAAA TCAGCCTTCA GACCAATCAA ACGTCTTCAT TTAAAGCTTA
1701 CCTGGACTTG GCATACTGCC CAGCTTTCC AAAACTACTC ACAATAATAC
1751 CTTCAACAAAC AGTTAAAAAA CGCTGGTACT CAAACAAAAT CAACAGCCTT
1801 TTCAACGACT GCTTTAAAAAA AGACCAAACA AACAAACAAG GAACGTCTTA
1851 ACCCAGAGAA GACAATTGCT TGGGAGAGGA AAAGTTGCT TCTGAGTTAG
1901 CAGCCTGTGG AAACAGGATT AGTGGGTGGG ATTGGGGTGT GCTCTGCCCA
1951 TAAATACAGG CTCAGCGCTG CGCTGGCACA CTGAGAAACT TGGACGGCAA
2001 CCCTTGCAGGC TCACACAAAG CAGGAGGGTG GGAAGCCCAG GTAAGGCAAT

FIG. 8